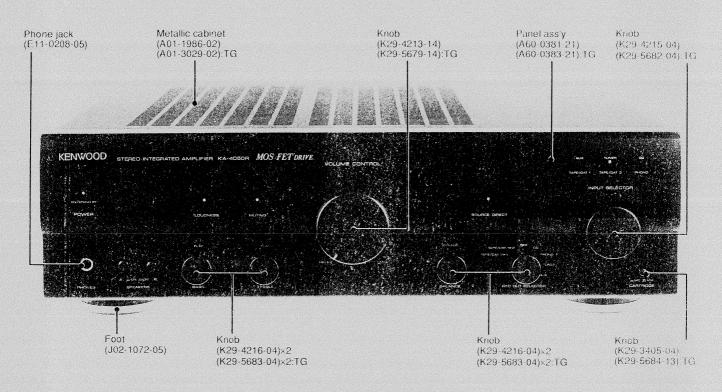
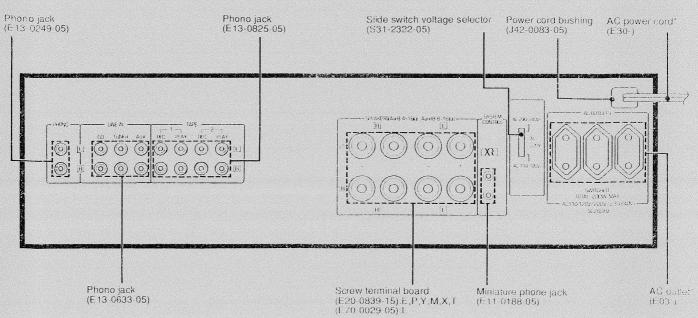
GERV. 32 649 STEREO INTEGRATED AMPLIFIER

KA-4050R SERVICE MANUAL

KENWOOD 1728

© 1993-3 PRINTED IN JAPAN B51-4707-00 (S) 2669





<A-4050R

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ADJUSTMENT/REGLAGES/ABGLEICH4	PARTS LIST	21
WIRING DIAGRAM5	SPECIFICATIONS	29
PC BOARD7		

ACCESSORIES

INSTRUCTION MANUAL

B60-1136-00 ENGLISH

B60-1137-00 FRENCH E B60-1138-00 GE, DU, IT E

E, L, P

B60-1139-00 CHINESE

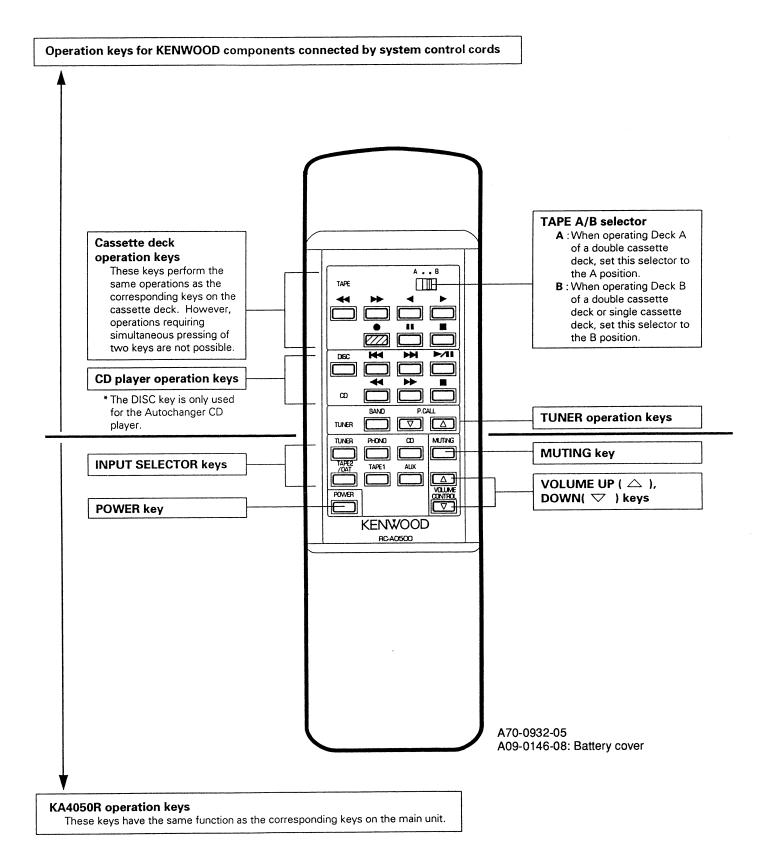
E, L

B60-1140-00 SPANISH

M E, M

KA-4050R KA-4050R

REMOTE CONTROL OPERATION



ADJUSTMENT/REGLAGE/ABGLEICH

ADJUSTMENT

N	10.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
		Unless otherwise POWER: ON		ective switches as follows REC OUT: OFF SELEC				
	1	IDLE CURRENT		Connect a DC voltmeter across CN27 CN28	VOLUME: 0	VR1, 3(L) VR2, 4(R)	6 mV (30 mA)	(a)

REGLAGES

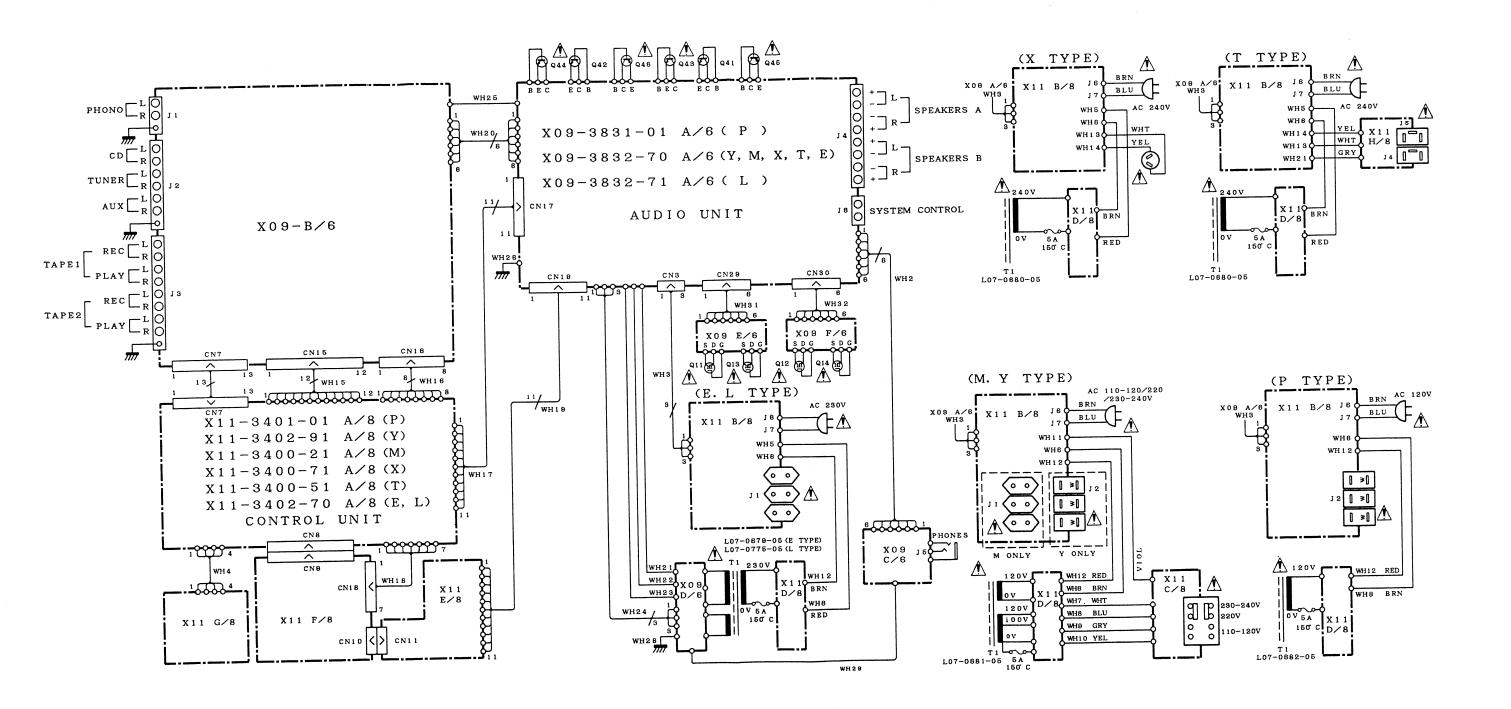
N°	ITEM	REGLAGE DE L'ENTREE			POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
	Sauf indicationcon POWER: ON SE		suit les commandes respe OUT: OFF SELECTO				
1	COURANT DE PLARISATION	_	Connecter un voltmètre de CC SUR CN27 CN28	VOLUME: 0	VR1, 3(G) VR2, 4(D)	6mV (30 mA)	(a)

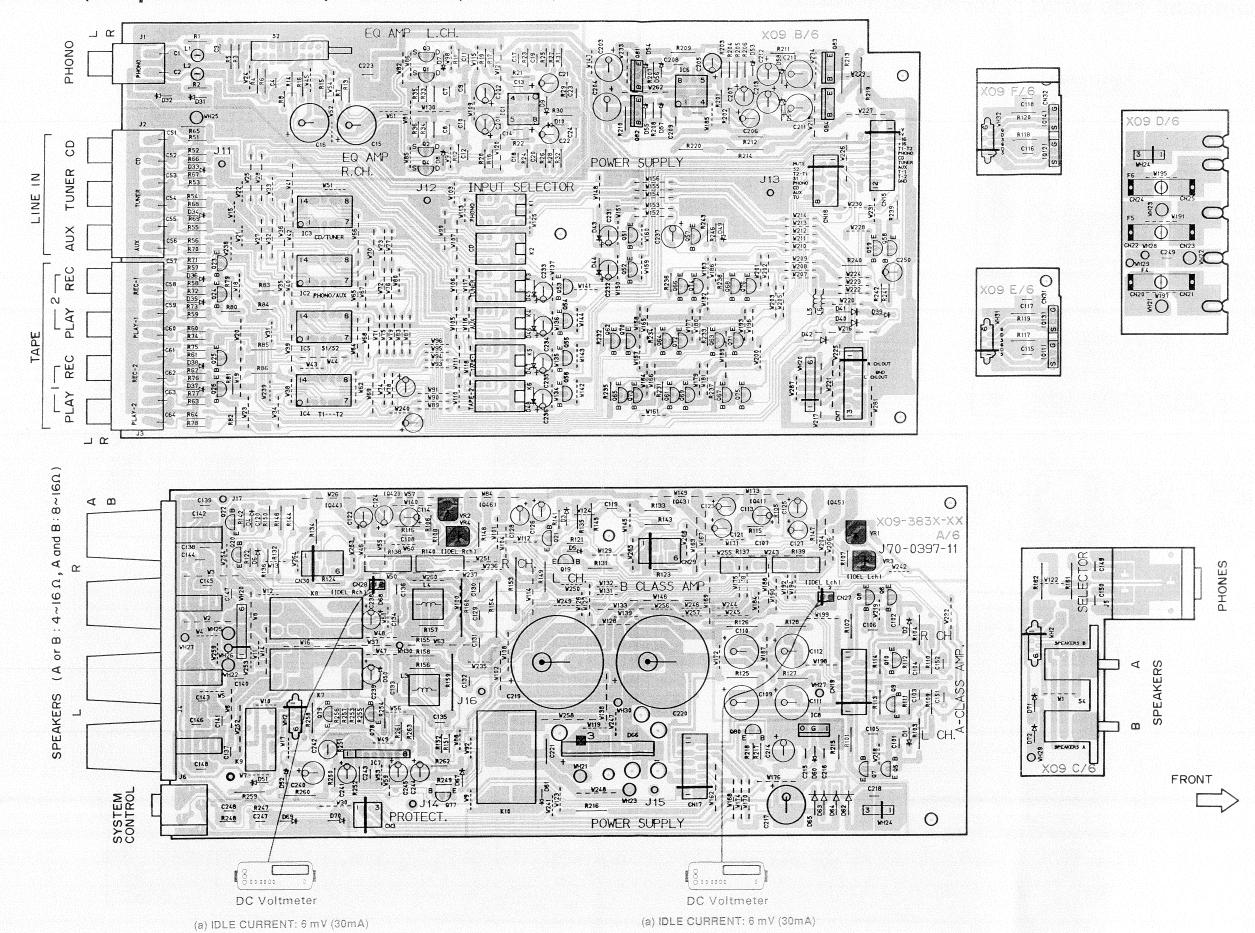
ABGLEICH

NR.	GEGENSTAND	EINGANGS- EINSTELLUNG	AUSGANGS- EINSTELLUNG	VORSTÄRKER- EINSTELLUNG	ABGLEICH- PUNKTE	ABGLEICHEN FUR	ABB.
			elnen Schalter wie folgt ei OUT: OFF SELECTE				
1	LEERLAUFSTROM	_	Einen Gleichspannungs- messer Uber CN27 CN28 anschließen.	VOLUME: 0	VR1, 3(L) VR2, 4(R)	6 mV (30 mA)	(a)

KA-4050R KA-4050R

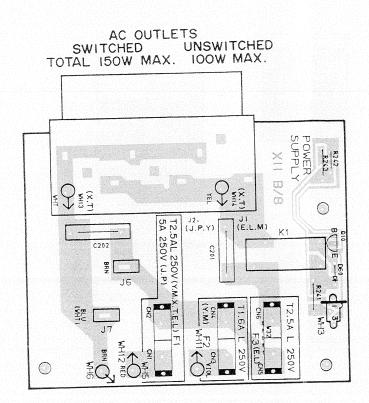
WIRING DIAGRAM

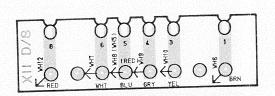


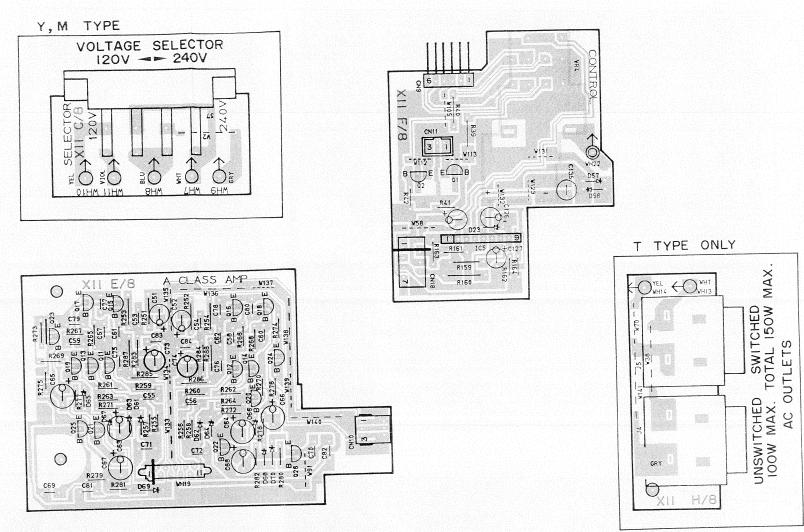


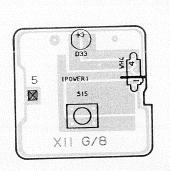
PC BOARD (Component side view)

CONTROL UNIT (X11-340X-XX)

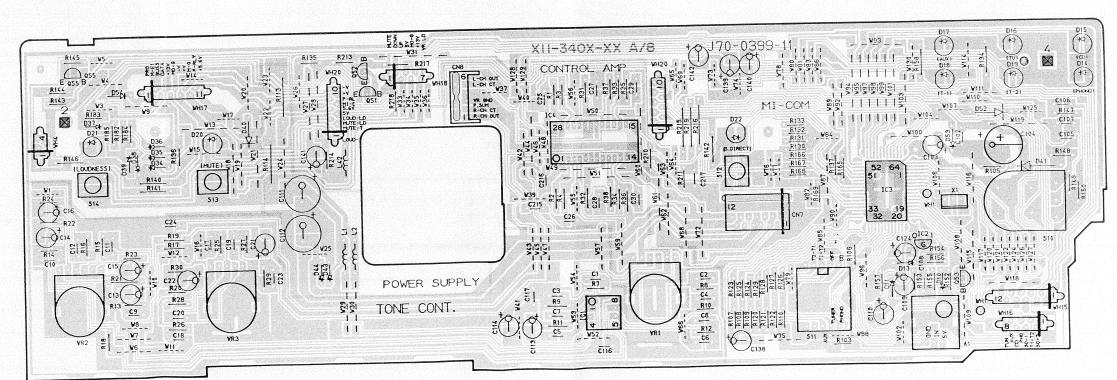




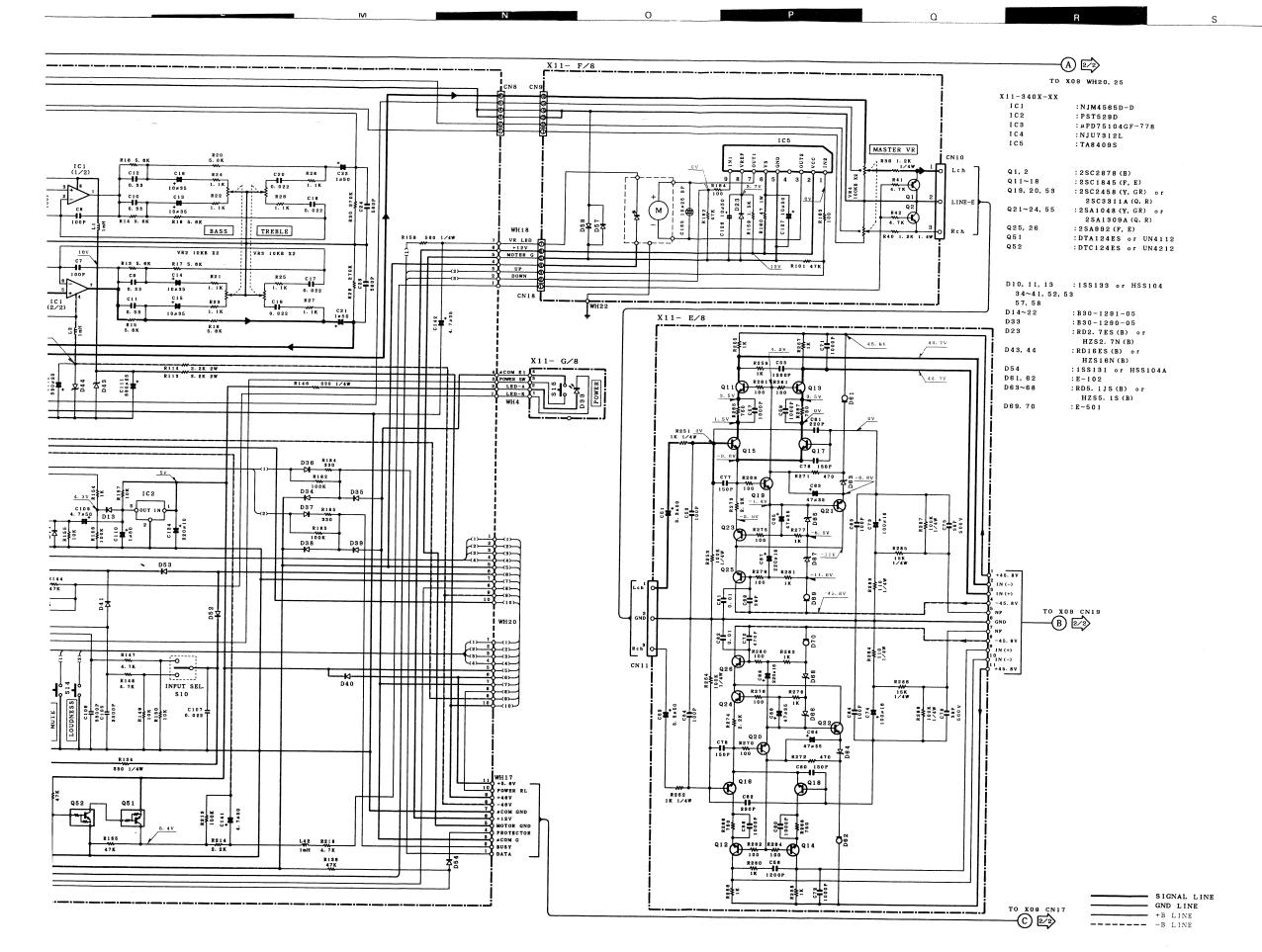








G



DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer lègèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). A Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

1/2

Y08-4822-70



KA-4050R KA-4050R

EXPLODED VIEW

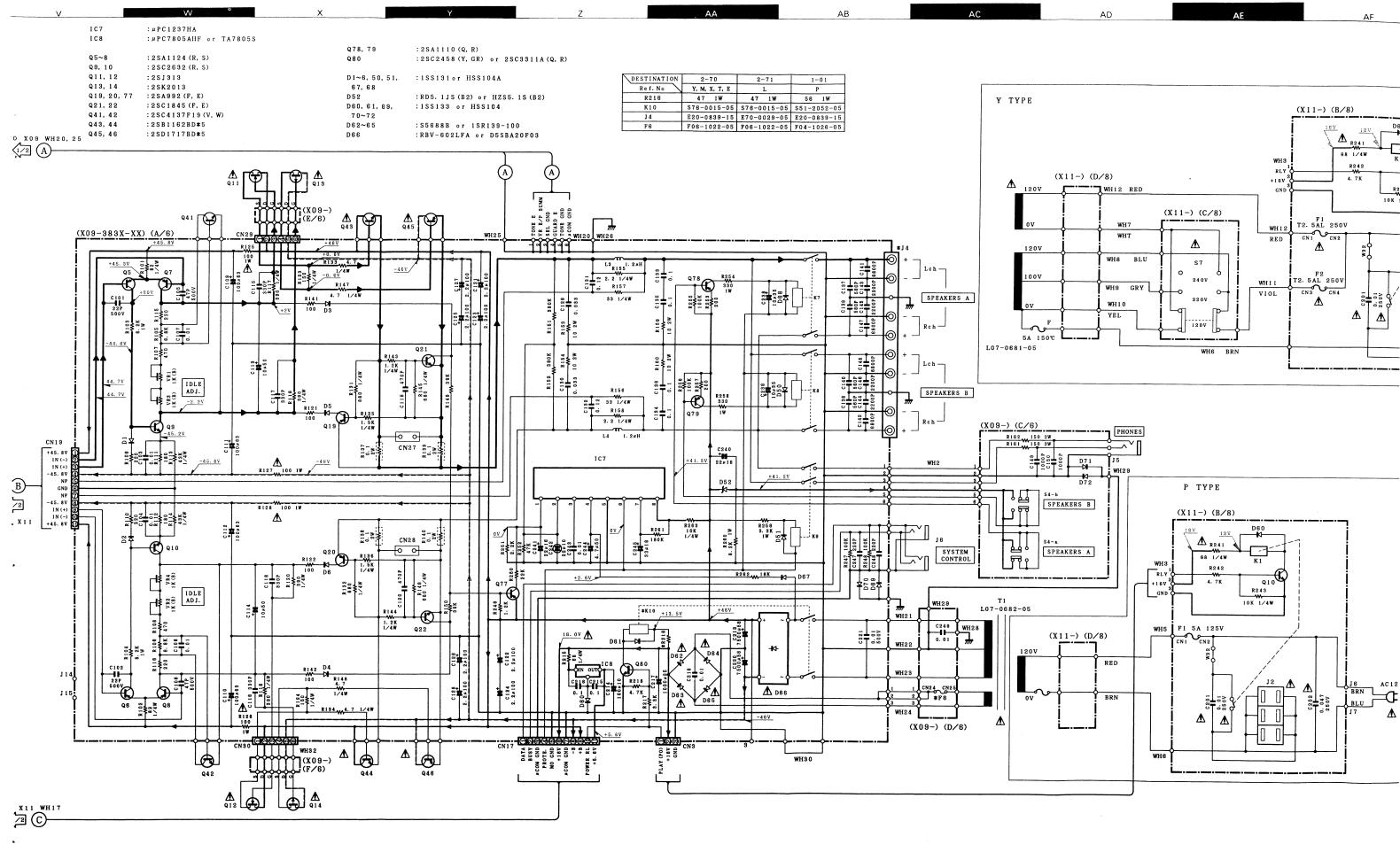
640 LINE IN PHONO CO TUNER AUX REC PLAY REC PLAY (x09) (XII) (D/6) 605 Hx3 (X09-3830-01 A/3) **•** 629 ⊕ Hx2 Hx5 (X09) (F/6) 601 (x09) Earth : NO8-0128-35 M3 x 8 : NO9-1445-05 M4 x 8(Bi-Tap) BLK : NO9-2768-05 M3 x 14 : NO9-2907-05 (XII E/8) & E (E/6) 731 Push rivet M3x 6 : N29 - 0268-05 : N30 - 3006-46 VOLUME CONTROL Φ4x 8(Bi-Tap) BLK : N86 - 4008-45 Φ3x 8(Bi-Tap) BLK : N89 - 3008-45 Φ3x IO(Bi-Tap) BLK : N89 - 3010-45 Hx2 726 CARTRIDGE S2 627 (XII) 626 619 (D/8) 622 SI5 (XII G/8) Hx 2 🖁 CN7 613 706 gg XII-3400- Hx2 01 A/8) 624x2 609 Hx2 Gx4 635 610 611 632 S12 (S. DIRECT) S10 S14 S13 (1) x2 Hx2 VR2 VR3 VRI SII 633 Hx2 Hx2 Parts with the exploded numbers larger than 700 are not supplied. 19

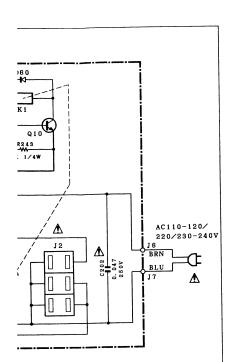
o varia-

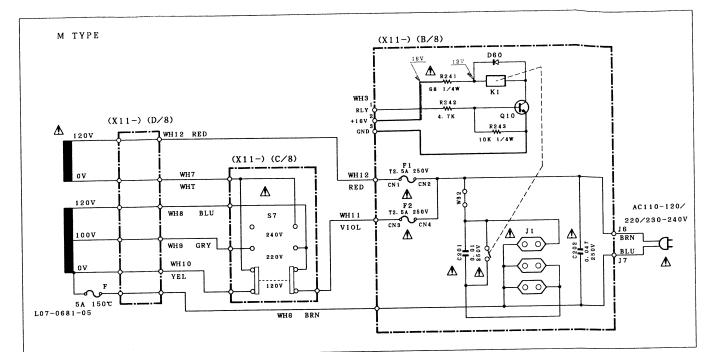
⁻-778

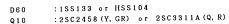
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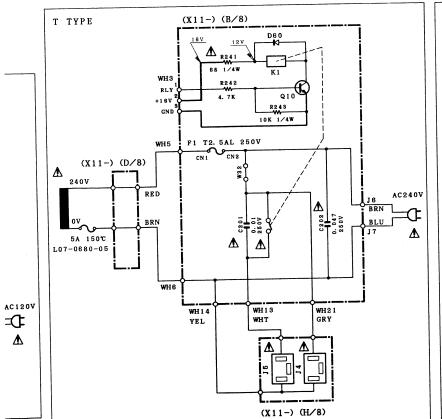
t einem gssignal von Un-

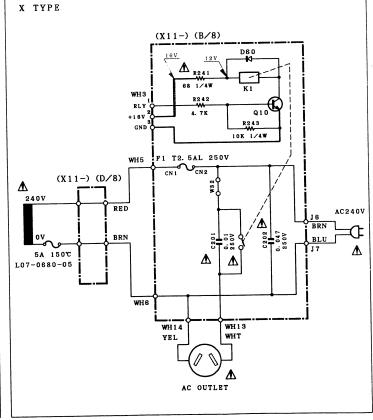


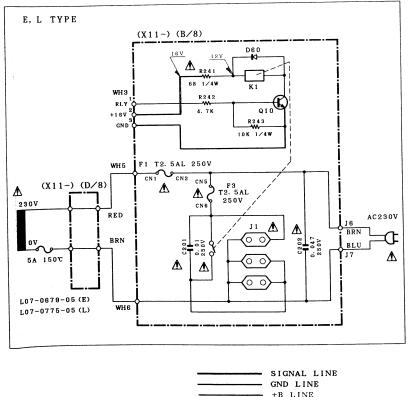










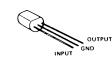


CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). A Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the custom-

----- -B LINE



2SB1375 2SD2012



2SA1124 2SA992 2SC1845 2SC2632 2SC2878





2SA1110



UPC7805AHF

PST529D

NJM4565D-D







TA7805S

DTA124ES DTC124ES DTC143TS UN4112 2SA1048 2SC2458



UPC1237HA







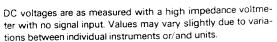


2SB1370 2SD2061



UN4212 UN4216 2SA1309A 2SC3311A





Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

2/2



PARTS LIST

× New Parts Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Ref. No.	Address	New	Parts	No.	Description	nation m	le- arks
参照番号		Parts 新	部品	番号	部品名/規格	土 向位	備考
\$ m	,			KA-4	050R		
601 602 603 605 606	1 A 2 A 3 A 1 B 1 B	* *	A01-1986 A60-0381 A60-0382 A70-0932 A09-0146	-21 -02 -05	METALLIC CABINET PANEL ASSY PANEL REMOTE CONTROLLER ASSY BATTERY COVER		
609 610 611 612 613	3B 3A 3A 2A 2A	*	B01-0483 B11-0237 B12-0163 B12-0232 B43-0287	-14 -04 -04	PANEL ESCUTCHEON COLOR FILTER INDICATOR INDICATOR KENWOOD BADGE		
- - - -			B46-0094 B46-0095 B46-0123 B46-0123	5-03 5-33 1-23	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	Y Y X P EL	
- - -		* *	B46-014 B58-051 B60-113 B60-113	3-04 6-00 7-00	WARRANTY CARD CAUTION CARD (PRESET220-240) INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH) INSTRUCTION MANUAL (GE,DU,IT)	T Y ELP EL	
-		*	B60-113 B60-114		INSTRUCTION MANUAL (CHINESE) INSTRUCTION MANUAL (SPANISH)	M EM	
614	3C	*	D21-165	7-23	EXTENSION SHAFT		
615 616 616 616 616	1B 1D 1D 1D		E03-011 E30-045 E30-068 E30-097 E30-271	9-05 5-05 4-05	AC PLUG ADAPTER AC POWER CORD AC POWER CORD AC POWER CORD AC POWER CORD	M ELM Y P X	
616 616 619	1 D 2B, 2	С	E30-271 E31-474 E03-014	7-05	AC POWER CORD FLAT CABLE X09-(CN7)-X11-(CN7) AC OUTLET	T X	
621	1C		F20-132	22-05	INSULATING BOARD		
622	2A	*	G10-018	35-04	NON-WOVEN FABRIC		
- - -		k k c	H50-06	30-04 68-12 69-02	ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE (L) POLYSTYRENE FOAMED FIXTURE (R) POLYSTYRENE FOAMED FIXTURE (L)	ELPYM) T ELPYM) ELPYM) T	ĸ
- - - -			H10-55 H25-02 H25-02 H25-06 H25-06	25-04 32-04 51-04	POLYSTYRENE FOAMED FIXTURE (R) PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03) PROTECTION BAG (0232 PRINTED) PROTECTION BAG (0225 PRINTED)	T ELPYM ELPYM T T	×
624 625 626 627 629	3C, 3 1B 2C 2C 1D	3D	J02-10 J19-05 J19-31 J19-31 J42-00	14-05 78-05 79-05	FOOT UNIT HOLDER UNIT HOLDER UNIT HOLDER UNIT HOLDER POWER CORD BUSHING		
_			J61-03	307-05	WIRE BAND		

L:Scandinavia Y:PX(Far East, Hawaii)

Y:AAFES(Europe)

K:USA

E:Europe T:England X:Australia M:Other Areas

P:Canada

⚠ indicates safety critical components.

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Teile ohne Parts No. werden nicht geliefert.

Ref. No.	Address	New Parts	Parts No.	Description	nation mark: 仕 向 備考
参照番号	位 置	新	部 品 番 号	部品名/規格	1.0 1.0
630 631 632 633 634	3B 2A 3A 3A 3A	*	(29-3405-04 (29-4210-03 (29-4213-14 (29-4215-04 (29-4216-04	KNOB CARTRIDGE (MM/MC) KNOB POWER KNOB VOLUME KNOB INPUT SELECTOR KNOB TONE, BAL, REC OUT SEL	
635	3C	*	K29-4293-23	KNOB CARTRIDGE (MM/MC ASSY)	
640 640 640 640 640	1B 1B 1B 1B 1B	* * *	L07-0679-05 L07-0680-05 L07-0681-05 L07-0682-05 L07-0775-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	E XT YM P L
A B C D E	1D 2A,3A 1A 1B,1C 2B	-	N08-0128-35 N09-1445-05 N09-2768-05 N09-2907-05 N29-0268-05	BINDING POST (EARTH) SET SCREW (M3X8) SEMS (TAPTITE SCREW)(4X8) SEMS (TAPTITE SCREW)(3X14) PUSH RIVET	
F G H K	1D,3D 3D 3C 2B		N30-3006-46 N86-4008-45 N89-3008-45 N89-3010-45	PAN HEAD MACHINE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW	
N .	125		KA-4050R (TO	G: TITAN GRAY)	
601 602 603 605 606	1 A 2 A 3 A 1 B 1 B	* * * *	A01-3029-02 A60-0383-21 A60-0384-02 A70-0932-05 A09-0146-08	METALLIC CABINET PANEL ASSY PANEL REMOTE CONTROLLER ASSY BATTERY COVER	
609 610 611 612 613	3B 3A 3A 2A 2A	*	B01-0500-01 B11-0237-14 B12-0163-04 B12-0232-04 B43-0287-04	PANEL ESCUTCHEON COLOR FILTER INDICATOR INDICATOR KENWOOD BADGE	
- - - -		* * *	B46-0122-23 B60-1136-00 B60-1137-00 B60-1138-00 B60-1140-00	WARRANTY CARD INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH) INSTRUCTION MANUAL (GE,DU,IT) INSTRUCTION MANUAL (SPANISH)	Е
614	3C	*	D21-1657-23	EXTENSION SHAFT	
616	1D 2B,2C		E30-0459-05 E31-4747-05	AC POWER CORD FLAT CABLE X09-(CN7)-X11-(CN7)	
621	1C		F20-1322-05	INSULATING BOARD	
622	2 A	*	G10-0185-04	NON-WOVEN FABRIC	
- - -		* *	H50-0607-04 H10-5168-12 H10-5169-02 H25-0225-04 H25-0232-04	ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE (L) POLYSTYRENE FOAMED FIXTURE (R) PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)	
624 625 626 627 A 629	3C, 3I 1B 2C 2C 1D		J02-1072-05 J19-0514-05 J19-3178-05 J19-3179-05 J42-0083-05	FOOT UNIT HOLDER UNIT HOLDER UNIT HOLDER UNIT HOLDER POWER CORD BUSHING	

PARTS LIST

L:Scandinavia Y:PX(Far East, Hawaii)

Y:AAFES(Europe)

K:USA T:England X:Australia

P:Canada E:Europe M:Other Areas

⚠ indicates safety critical components.

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1	Ref. No.	Address	New	Parts No.	Description	Desti-	Re-
	参照番号	位 置	Parts 新	部品番号	部品名/規格		marks 備考
	630 631 632 633 634	3B 2A 3A 3A 3A	*	K29-3405-04 K29-4210-03 K29-4213-14 K29-4215-04 K29-4216-04	KNOB CARTRIDGE (MM/MC) KNOB POWER KNOB VOLUME KNOB INPUT SELECTOR KNOB TONE,BAL,REC OUT SEL		
	635	3C	*	K29-4293-23	KNOB CARTRIDGE (MM/MC ASSY)		
	640 640 640 640 640	1 B 1 B 1 B 1 B 1 B	* * * * *	L07-0679-05 L07-0680-05 L07-0681-05 L07-0682-05 L07-0775-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	E XT YM P L	
	A B C D E	1D 2A,3A 1A 1B,1C 2B	-	N08-0128-35 N09-1445-05 N09-2768-05 N09-2907-05 N29-0268-05	BINDING POST (EARTH) SET SCREW (M3X8) SEMS (TAPTITE SCREW)(4X8) SEMS (TAPTITE SCREW)(3X14) PUSH RIVET		
	F G H K	1D,3D 3D 3C 2B		N30-3006-46 N86-4008-45 N89-3008-45 N89-3010-45	PAN HEAD MACHINE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
				KA-4050R (TG	: TITAN GRAY)		
	601 602 603 605 606	1 A 2 A 3 A 1 B 1 B	* * *	A01-3029-02 A60-0383-21 A60-0384-02 A70-0932-05 A09-0146-08	METALLIC CABINET PANEL ASSY PANEL REMOTE CONTROLLER ASSY BATTERY COVER		
	609 610 611 612 613	3B 3A 3A 2A 2A	*	B01-0500-01 B11-0237-14 B12-0163-04 B12-0232-04 B43-0287-04	PANEL ESCUTCHEON COLOR FILTER INDICATOR INDICATOR KENWOOD BADGE		
	- - -		* * *	B46-0122-23 B60-1136-00 B60-1137-00 B60-1138-00 B60-1140-00	WARRANTY CARD INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH) INSTRUCTION MANUAL (GE, DU, IT) INSTRUCTION MANUAL (SPANISH)	E	
	614	3C	*	D21-1657-23	EXTENSION SHAFT		
Δ	616 619	1D 2B,2C		E30-0459-05 E31-4747-05	AC POWER CORD FLAT CABLE X09-(CN7)-X11-(CN7)		
	621	1C		F20-1322-05	INSULATING BOARD		
	622	2A	*	G10-0185-04	NON-WOVEN FABRIC		
	- - -		* *	H50-0607-04 H10-5168-12 H10-5169-02 H25-0225-04 H25-0232-04	ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE (L) POLYSTYRENE FOAMED FIXTURE (R) PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)		
Δ	624 625 626 627 629	3C,3D 1B 2C 2C 1D		J02-1072-05 J19-0514-05 J19-3178-05 J19-3179-05 J42-0083-05	FOOT UNIT HOLDER UNIT HOLDER UNIT HOLDER POWER CORD BUSHING		
	L		<u> </u>				

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii) Y:AAFES(Europe)

T:England

E:Europe X:Australia M:Other Areas

indicates safety critical components.

PARTS LIST

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	Ref. No.	Address	New Parts	Parts No.	Description		Re-
	参照番号	位 置	新	部品番号	部品名/規格		marks 備考
	-			J61-0307-05	WIRE BAND		
	630 631 632 633 634	3B 2A 3A 3A 3A	* * * *	K29-5684-13 K29-5678-03 K29-5679-14 K29-5682-04 K29-5683-04	KNOB CARTRIDGE (MM/MC) KNOB POWER KNOB VOLUME KNOB INPUT SELECTOR KNOB TONE,BAL,REC OUT SEL		
	635	3C	*	K29-5685-04	KNOB CARTRIDGE (MM/MC ASSY)		
⚠	640 640	7 7 1	* *	L07-0679-05 L07-0775-05	POWER TRANSFORMER POWER TRANSFORMER	E L	
	A B C D E	1D 2A,3A 1A 1B,1C 2B		N08-0128-35 N09-1445-05 N09-2768-05 N09-2907-05 N29-0268-05	BINDING POST (アース) SET SCREW (M3X8 サラ) SEMS (TAPTITE SCREW)(4X8 ハペイント SEMS (TAPTITE SCREW)(3X14) PUSH RIVET		
	F G H K	1D,3D 3D 3C 2B		N30-3006-46 N86-4008-45 N89-3008-45 N89-3010-45	PAN HEAD MACHINE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
				AUDIO UNIT	(X09-383X-XX)	L	
	C1 ,2 C3 ,4 C7 -10 C11 ,12 C13 ,14			CF92FV1H101K CF92FV1H471J CF92FV1H122J CC45FSL1H390J CF92FV1H332J	MF 100PF K MF 470PF J MF 1200PF J CERAMIC 39PF J MF 3300PF J		
	C15 ,16 C17 ,18 C19 ,20 C21 ,22 C23 ,24			C90-1951-05 CF92FV1H393J CF92FV1H113J CE04KW1H220M CF92FV1H392J	ELECTRO 3300UF 6.3WV MF 0.039UF J MF 0.011UF J ELECTRO 22UF 50WV MF 3900PF J		
	C51 -64 C101,102 C103,104 C105,106 C107,108			CF92FV1H151K CC45FSL2H220J CF92FV1H103J CC45FSL2H470J CF92FV1H103J	MF 150PF K CERAMIC 22PF J MF 0.010UF J CERAMIC 47PF J MF 0.010UF J		
	C109-112 C113,114 C119,120 C121-128 C129,130			CE04DW1J101M CE04KW1H100M CF92FV1H471J CE04KW2A2R2M CF92FV1H333J	ELECTRO 100UF 63WV ELECTRO 10UF 50WV MF 470PF J ELECTRO 2.2UF 100WV MF 0.033UF J		
	C131,132 C133-136 C137-140 C141,142 C143-146	-		CF92FV1H124J CF92FV1H104J CF92FV1H561J CF92FV1H682J CK45FB1H222K	MF 0.12UF J MF 0.10UF J MF 560PF J MF 6800PF J CERAMIC 2200PF K		
	C147,148 C149,150 C201,202 C203,204 C205,206			CF92FV1H682J CF92FV1H102J CE04KW1V100M CE04KW1E221M CE04KW1V100M	MF 6800PF J MF 1000PF J ELECTRO 10UF 35WV ELECTRO 220UF 25WV ELECTRO 10UF 35WV		
	C207 C208,209 C210,211 C212,213			CE04KW1H470M CF92FV1H104J CE04KW1V101M CE04KW1V470M	ELECTRO 47UF 50WV MF 0.10UF J ELECTRO 100UF 35WV ELECTRO 47UF 35WV		

L:Scandinavia

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T:England E:Europe

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♠ indicates safety critical components.

KA-4050R

PARTS LIST

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Ref. No.	Add	ress	New Parts	Parts No.	Description	Desti-Re- nation mark
参照番号	位	置	Parts 新	部品番号	部品名/規格	仕 向 備考
2214 2215,216 2217 2218 2219,220			*	CE04KW1A101M CF92FV1H104J CE04KW1E102M CK45FF1H103Z C90-3510-05	ELECTRO 100UF 10WV MF 0.10UF J ELECTRO 1000UF 25WV CERAMIC 0.010UF Z ELECTRO 7500UF 56WV	
0221 0223 0231-236 0237 0238,239				CK45FE2H103P CF92FV1H103J CE04KW1H010M CE04KW1E101M CE04KW1V100M	CERAMIC 0.010UF P MF 0.010UF J ELECTRO 1.0UF 50WV ELECTRO 100UF 25WV ELECTRO 10UF 35WV	
C240,241 C242 C243 C244 C245			-	CE04KW1C220M CE04HW1A220M CK45FF1H103Z CE04KW1H4R7M CE04KW1C330M	ELECTR® 22UF 16WV NP-ELEC 22UF 10WV CERAMIC 0.010UF Z ELECTR® 4.7UF 50WV ELECTR® 33UF 16WV	
C247,248 C249 C250				CC45FSL1H221J CK45FF1H103Z CE04KW1H010M	CERAMIC 220PF J CERAMIC 0.010UF Z ELECTRO 1.0UF 50WV	
CN7 J1 J2 J3 J4	20			E40-4153-05 E13-0249-05 E13-0633-05 E13-0825-05 E20-0839-15	FLAT CABLE CONNCTOR PHONO JACK PHONO PHONO JACK(6P) CD/TUNER/AUX PHONO JACK TAPE1,2 REC,PLAY SCREW TERMINAL BOARD SPEAKERS	ЕРҮМХТ
J4 J5 J6				E70-0029-05 E11-0208-05 E11-0188-05	SCREW TERMINAL BOARD SPEAKERS PHONE JACK PHONOS MINIATURE PHONE JACK SYNCHRO	L
F6 F6				F04-1026-05 F06-1022-05	FUSE (UL) (250V 1A UL) FUSE (SEMKO) (250V T1AL)	PELYMXT
- CN24,25				J11-0098-05 J13-0075-05	WIRE CLAMPER FUSE CLIP	
L1 ,2 L3 ,4 L5 ,6				L40-1011-47 L39-0085-05 L40-1011-17	SMALL FIXED INDUCTOR(100UH,K) PHASE COMPENSATION COIL SMALL FIXED INDUCTOR(100UH,K)	
R23 ,24 R25 ,26 R101,102 R103,104 R117-120				RN14BK2C8202FTS RN14BK2C6801FTS RD14AB2E820JTS RS14DB3A822JTE RD14AB2E391JTS	RN 82.0K F 1/6W RN 6.80K F 1/6W FL-PROOF RD 82 J 1/4W FL-PROOF RD 82 J 1W FL-PROOF RD 390 J 1/4W	
R123,124 R125-128 R131,132 R133,134 R135,136				RD14AB2E151JTS RS14DB3A101JTE RD14AB2E681JTS RD14AB2E4R7JTS RD14AB2E152JTS	FL-PROOF RD 150 J 1/4W FL-PROOF RS 100 J 1W FL-PROOF RD 680 J 1/4W FL-PROOF RD 4.7 J 1/4W FL-PROOF RD 1.5K J 1/4W	
R137-140 R143,144 R145,146 R147,148 R153,154				R92-0205-05 RD14AB2E122JTS RD14AB2E681JTS RD14AB2E4R7JTS RS14GB3D100JKW	METAL-PLATE 0.1 K 2W FL-PROOF RD 1.2K J 1/4W FL-PROOF RD 680 J 1/4W FL-PROOF RD 4.7 J 1/4W FL-PROOF RS 10 J 2W	
R155 R156,157 R158 R159,160 R161,162				RD14AB2E2R2JTS RD14AB2E330JTS RD14AB2E2R2JTS RS14GB3D100JKW RS14DB3D151JTE	FL-PR00F RD 2.2 J 1/4W FL-PR00F RD 33 J 1/4W FL-PR00F RD 2.2 J 1/4W FL-PR00F RS 10 J 2W FL-PR00F RS 150 J 2W	

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参照番号	位 置	新	部品番号	部品名/規格	仕 向備
R209 R211,212 R213 R214 R215			RD14AB2E472JTS RD14AB2E472JTS RS14DB3D101JTE RS14DB3D331JTE RD14AB2E680JTS	FL-PROOF RD 4.7K J 1/4W FL-PROOF RD 4.7K J 1/4W FL-PROOF RS 100 J 2W FL-PROOF RS 330 J 2W FL-PROOF RD 68 J 1/4W	
R216 R216 R219 R254 R258			RS14DB3A470JTE RS14DB3A560JTE RS14DB3D101JTE RS14DB3A331JTE RS14DB3A331JTE	FL-PROOF RS 47 J 1W FL-PROOF RS 56 J 1W FL-PROOF RS 100 J 2W FL-PROOF RS 330 J 1W FL-PROOF RS 330 J 1W	ELYMXT P
R259 R260 VR1 -4			RS14DB3A332JTE RS14DB3A822JTE R12-1616-05	FL-PROOF RS 3.3K J 1W FL-PROOF RS 8.2K J 1W TRIMMING POT.(1K) IDL	
K1 -6 K7 ,8 K9 K10 K10			\$76-0027-05 \$51-2092-05 \$51-2090-05 \$51-2052-05 \$76-0015-05	MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY	P ELYMXT
S2 S4			S40-6035-05 S42-2139-05	PUSH SWITCH CARTRIDGE MC/MM MULTIPLE PUSH SWITCH SPEAKERS	
D1 -6 D1 -6 D7 -10 D7 -10 D31 -34			HSS104A 1SS131 HSS104 1SS133 HSS104	DIODE DIODE DIODE DIODE DIODE	
D31 -34 D37 -48 D37 -48 D49 D49			1SS133 HSS104 1SS133 HZS7.5S(B) RD7.5JS(B)	DIODE DIODE DIODE ZENER DIODE ZENER DIODE	
D50 ,51 D50 ,51 D52 ,53 D52 ,53 D54			HSS104A 1SS131 HZS5.1S(B2) RD5.1JS(B2) HZS7.5S(B)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE	
D54 D55 D55 D56 D56			RD7.5JS(B) HZS15S(B) RD15JS(B) HZS7.5S(B) RD7.5JS(B)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE	
D57 D57 D58 ,59 D58 ,59 D60 ,61			HZS15S(B) RD15JS(B) HZS30N(B) RD30ES(B) HSS104	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE DIODE	
D60 ,61 D62 -65 D62 -65 D66 D66			1SS133 S5688B 1SR139-100 D5SBA20F03 RBV-602LFA	DIQDE DIQDE DIQDE DIQDE DIQDE	
D67 ,68 D67 ,68 D69 -72 D69 -72			HSS104A 1SS131 HSS104 1SS133	DIODE DIODE DIODE DIODE	

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参照番号	1 1	arts 新	部品	番号	部品	1 名/規	格	nation 仕 向	備考
IC1 IC2 -5 IC6 IC7 IC8			NJM4565D LC4966 NJM4565D UPC1237H TA7805S	- D	IC(OP AMP X2 IC(CMOS LOGI IC(OP AMP X2 IC(POWER AMP IC(VOLTAGE RI	C BILATERA))			
IC8 Q1 -4 Q1 -4 Q5 -8 Q9 ,10			UPC7805A 2SK170(B 2SK170(V 2SA1124(2SC2632(L) ') R,S)	IC(VOLTAGE RIFET FET TRANSISTOR TRANSISTOR	EGULAT 0 R/	+5V)		
Q11 ,12 Q13 ,14 Q19 ,20 Q21 ,22 Q23 -26		*	2SJ313 2SK2013 2SA992(F 2SC1845(2SC2878(F,E)	FET FET TRANSISTOR TRANSISTOR TRANSISTOR				
Q41 ,42 Q43 ,44 Q45 ,45 Q51 -56 Q51 -56			2SC4137F 2SB1162B 2SD1717B DTC143TS UN4216	D*5 D*5	TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	SIST O R			
Q57 Q58 Q58 Q59 Q59			2SA992(F DTA124ES UN4112 DTC143TS UN4216	5	TRANSISTOR DIGITAL TRANS TRANSISTOR DIGITAL TRANS TRANSISTOR				
Q61 -68 Q61 -68 Q69 -76 Q69 -76 Q77			DTA124ES UN4112 DTC124ES UN4212 2SA992(F	3	DIGITAL TRANS TRANSISTOR DIGITAL TRANS TRANSISTOR TRANSISTOR				
Q78 ,79 Q80 Q80 Q81 -83 Q81 -83			2SA1110(2SC2458(2SC3311A 2SD2012 2SD2061(Y,GR) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR				
Q84 Q84			2SB1370(2SB1375	E,F)	TRANSISTOR TRANSISTOR				
			CON	TROL UN	IT (X11-340X-X	(X)			
D14 -22 D33			B30-1291 B30-1290			SLX(V)-(TA			
C1 ,2 C3 -8 C9 -12 C13 -16 C17 -20			CF92FV1H CF92FV1H CF92FV1H CE04KW1V CF92FV1H	H101K H334J /100M	MF MF ELECTRO MF	0.33UF 100PF 0.33UF 10UF 0.022UF	J K J 35WV J		
C21 ,22 C23 ,24 C25 ,26 C27 ,28 C29 ,30			CE04KW1H CF92FV1H CF92FV1H CF92FV1H CF92FV1H	H561J H101K H331K	ELECTRO MF MF MF	1.0UF 560PF 100PF 330PF 0.068UF	50WV J K K J		
C51 ,52 C53 ,54 C55 ,56 C57 -60			CE04KW1H CF92FV1H CF92FV1H CF92FV1H	H101K H122J	ELECTRO MF MF MF	3.3UF 100PF 1200PF 1000PF	50WV K J J		

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26

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参照番号	位 置	新	部品番号	品語	品名/規	格	nation 仕 向	mar 備 オ
C61 ,62 C63 -66 C67 ,68 C69 ,70 C71 ,72			CF92FV1H221K CE04KW1V470M CE04KW1C221M CF92FV1H471J CF92FV1H102J	MF ELECTRO ELECTRO MF MF	220PF 47UF 220UF 470PF 1000PF	K . 35WV 16WV J J		
C73 ,74 C75 ,76 C77 -80 C81 ,82 C83 ,84			C90-1917-05 CC45FSL2H390J CF92FV1H151K CF92FV1H103J CF92FV1H101K	ELECTRO CERAMIC MF MF MF	100UF 39PF 150PF 0.010UF 100PF	16WV J K J K		
C102 C103 C104 C105,106 C107			CF92FV1H471J CE04KW1H100M C90-1827-05 CF92FV1H332J CF92FV1H223J	MF ELECTRO BACKUP MF MF	470PF 10UF 0.047F 3300PF 0.022UF	J 50WV 5.5WV J J		
C108 C109 C110 C111,112 C113,114			CF92FV1H103J CE04KW1H4R7M CE04KW1H010M CE04DW1E331M CE04KW1E470M	MF ELECTRO ELECTRO ELECTRO ELECTRO	0.010UF 4.7UF 1.0UF 330UF 47UF	J 50WV 50WV 25WV 25WV		
C116,117 C124 C126,127 C135 C138			CF92FV1H103J CE04KW1A221M CE04KW1H100M CE04HW1E100M CE04KW1H100M	MF ELECTRO ELECTRO NP-ELEC ELECTRO	0.010UF 220UF 10UF 10UF 10UF	J 10WV 50WV 25WV 50WV		
C141 C142 C201 C202 C215,216			CE04KW1H4R7M CE04KW1V4R7M C91-1439-05 C91-1444-05 CF92FV1H103J	ELECTRO ELECTRO FILM MF MF	4.7UF 4.7UF 0.01UF 0.047UF 0.010UF	50WV 35WV 250VAC 250VAC J		
C217			CK45FB1H152K	CERAMIC	1500PF	K		
CN7 J1 J2 J4 ,5	2B	*	E40-4553-05 E03-0143-05 E03-0142-05 E03-0109-05	FLAT CABLE CO AC OUTLET AC OUTLET AC OUTLET	ONNCTOR		ELM PY T	
F1 F1 F1,2 F3			F04-5022-05 F05-2525-05 F05-2525-05 F05-2525-05	FUSE (UL) FUSE (SEMKO) FUSE (SEMKO) FUSE (SEMKO)	(125V 5 (250V 1 (250V 1	T2.5A) T2.5A)	P ELXT YM EL	
CN1 -4 CN1 ,2 CN5 ,6			J13-0075-05 J13-0075-05 J13-0075-05	FUSE CLIP FUSE CLIP FUSE CLIP			YM ELPXT EL	
L1 ,2 L42 X1			L40-1021-14 L40-1021-14 L78-0267-05	SMALL FIXED I SMALL FIXED I RESONATOR	NDUCTOR(1 NDUCTOR(1 (4.194M	.OMH,K)		
R113,114 R160 R241 R283,284 R285,286			RS14DB3D222JTE RS14DB3A470JTE RD14AB2E680JTS RN14BK2E1100FTS RN14BK2E1502FTS	FL-PROOF RS FL-PROOF RS FL-PROOF RD RN RN	2.2K 47 68 110.0 15.0K	J 2W J 1W J 1/4W F 1/4W F 1/4W		
VR1 VR2 ,3 VR4			R06-5191-05 R06-3061-05 R29-5058-05	POTENTIOMETER POTENTIOMETER POTENTIOMETER	BASS/TRE	BLE R		

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	参照番号	位 置	新	部品番号	部 品 名 / 規 格		備考
Δ	K1 S7 S11 S12 -15			S76-0009-05 S31-2322-05 S60-0010-05 S40-1064-05	MAGNETIC RELAY SLIDE SWITCH VOLTAGE SELECTOR ROTARY SWITCH REC OUT SELECTOR PUSH SWITCH DIR, MUT, LOUD, POW	YM	
	S10			T99-0521-05	ROTARY ENCODER INPUT SELECTOR		
	D10 ,11 D10 ,11 D13 D13 D23			HSS104 1SS133 HSS104 1SS133 HZS2.7N(B)	DIODE DIODE DIODE DIODE ZENER DIODE		
	D23 D34 -41 D34 -41 D43 ,44 D43 ,44			RD2.7ES(B) HSS104 1SS133 HZS16N(B) RD16ES(B)	ZENER DIODE DIODE DIODE ZENER DIODE ZENER DIODE		
	D52 ,53 D52 ,53 D54 D54 D57 ,58			HSS104 1SS133 HSS104A 1SS131 HSS104	DIODE DIODE DIODE DIODE DIODE		
	D57 ,58 D60 D60 D61 ,62 D63 -68			1SS133 HSS104 1SS133 E-102 HZS5.1S(B)	DIODE DIODE DIODE CONSTANT CURRENT DIODE ZENER DIODE		
	D63 -68 D69 ,70 IC1 IC2 IC3			RD5.1JS(B) E-501 NJM4565D-D PST529D UPD75104GF-778	ZENER DIODE CONSTANT CURRENT DIODE IC(OP AMP X2) IC(SYSTEM RESET) IC(4BIT MICROPROCESSOR)		
	IC4 IC5 Q1 ,2 Q10 Q10			NJU7312L TA8409S 2SC2878(B) 2SC2458(Y,GR) 2SC3311A(Q,R)	IC(ANALOG SWITCH) IC(MOTOR CONTROL) TRANSISTOR TRANSISTOR TRANSISTOR		
	Q11 -18 Q19 ,20 Q19 ,20 Q21 -24 Q21 -24			2SC1845(F,E) 2SC2458(Y,GR) 2SC3311A(Q,R) 2SA1048(Y,GR) 2SA1309A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
	Q25 ,26 Q51 Q51 Q52 Q52			2SA992(F,E) DTA124ES UN4112 DTC124ES UN4212	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR		
	Q53 Q53 Q55 Q55			2SC2458(Y,GR) 2SC3311A(Q,R) 2SA1048(Y,GR) 2SA1309A(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
	A1			W02-1046-05	ELECTRIC CIRCUIT MODULE REM		

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SPECIFICATIONS

For U.S.A. and Canada

Continuous rated power output (FTC)

60 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20,000 Hz with no more than 0.06% total harmonic distortion.

than 0.06% total harm	
Dynamic power	90 W (8 s
	120 W (4 s
Damping factor	200 (50 H
	ı
	(20 Hz ~ 20,000 Hz, 60 W, 8 s
	0.02
	(1 kHz, 60 W, 8
Intermodulation distortion	on
(70 Hz : 7 kHz = 4 : 1)	
Frequency response(IHF'	701
TUNER/AUX/TAPE1, 2	
	5 Hz ~ 100 kHz, +0 dB, -3 d
PHONO 'RIAA' response	20 Hz ~ 20 kH
	+0.3 dB, -0.3 d
Maximum input level	
	. 120 mV, 0.05% T.H.D. at 1 kH
PHONO (MC)	10 mV, 0.05% T.H.D. at 1 kH
Signal to noise ratio	
PHONO (MM)	87 dB (IHF '6
,	79 dB (IHF '7
PHONO (MC)	67 dB (IHF '6
1110110 (1110)	74 dB (IHF '7
THNED/ALLY/TADE1 2	/CD104 dB (IHF '6
TONEN/AUX/TAFET, 2	80 dB (IHF '7
Input sensitivity/impedar	
PHONIO (MMM)	2.5 mV/47 k
	0.2 mV/100
	/CD200 mV/47 k
	/CD200 111V/47 K
Tone control	140 JD /- 4400 H
	±10 dB (at 100 H
	±10 dB (at 10 kH
Loudness control	
(VOLUME at –30 dB lev	/el)+6 dB (100 H
	+3 dB (10 kH
Output level/impedance	
TAPE REC	200 mV/1 k
General	
Power consumption	
	2.5
For II S Military	220 \
AC outlets	220 \
For Canada	
	3; (Total 200 W, 1.6 A max
For U.S. Military	
SWITCHED	3; (Total 200 W max
Dimensions	W: 440 mm (17-5/16
	H: 137 mm (5 - 3 / 8
	D : 345 mm (13-9/16
	D . 373 IIIII (13-3/10

For U.K. and Europe

Continuous rated power output
(DIN) 1 kHz, at 8 Ω 70 W + 70 W
at 4 Ω90 W + 90 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.
at 8 Ω70 W + 70 W
at 4 Ω90 W + 90 W
Dynamic power90 W (8 Ω)
120 W (4 Ω)
Damping factor200 (50 Hz)
Total harmonic distortion0.06%
(20 Hz ~ 20,000 Hz, 60 W, 8 Ω)
0.02%
(1 kHz, 60 W, 8 Ω)
Intermodulation distortion0.02% (60 W, 8 Ω)
(70 Hz: 7 kHz = 4:1)
Frequency response (IHF '78)
TUNER/AUX/TAPE1, 2/CD
5 Hz ~ 100 kHz, +0 dB, -3 dB
PHONO 'RIAA' response20 Hz ~ 20 kHz,
+0.3 dB, -0.3 dB
Maximum input level
PHONO (MM)120 mV, 0.05% T.H.D. at 1 kHz
PHONO (MC)10 mV, 0.05% T.H.D. at 1 kHz
Signal to noise ratio
PHONO (MM)87 dB (IHF '66)
79 dB (IHF '78)
PHONO (MC)
74 dB (IHF '78)
TUNER/AUX/TAPE1, 2/CD104 dB (IHF '66)
80 dB (IHF '78)
PHONO (MM)58 dB (DIN, 50 mW output)
TUNER/AUX/TAPE1, 2/CD
59 dB (DIN, 50 mW output)
55 db (bitv, 50 filev output)
nnut cancitivity/impadance
nput sensitivity/impedance PHONO (MM)2.5 mV/47 kΩ
PHONO (MC)
TUNER/AUX/TAPE1, 2/CD200 mV/47 kΩ
Tone control
BASS±10 dB (at 100 Hz)
TREBLE±10 dB (at 10 kHz)
Loudness control
(VOLUME at -30 dB level)+6 dB (100 Hz)
+3 dB (10 kHz)
Output level/impedance
TAPE REC200 mV/1 kΩ
General
Power consumption220 W (IEC)
AC outlets
For U.K.
SWITCHED2; (Total 200 W max.)
For Europe
SWITCHED3; (Total 200 W max.)
Dimensions W: 440 mm
H: 137 mm
D: 345 mm
Weight (net) 8 5kg

Weight (net)

.....8.5kg

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KA-4050R

SPECIFICATIONS

For other countries

Continuous rated power output	Input sensitivity/impedance
(IHF '66) From 20 Hz to 20,000 Hz 0.06% T.H.D.	PHONO (MM)
at 8 Ω60 W + 60 W	PHONO (MC)
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	TUNER/AUX/TAPE1, 2/CD
at 8 Ω 70 W + 70 W	Tone control
at 4 Ω90 W + 90 W	BASS
Dynamic power90 W (8 Ω)	TREBLE
120 W (4 Ω)	Loudness control
	(VOLUME at -30 dB level).
Damping factor200 (50 Hz)	(**==::::= =: •• == ::•:•.,.
Total harmonic distortion0.06%	Output level/impedance
(20 Hz ~ 20,000 Hz, 60 W, 8 Ω)	TAPE REC
0.02%	
(1 kHz, 60 W, 8 Ω)	
Intermodulation distortion0.02% (60 W, 8 Ω) (70 Hz : 7 kHz = 4 : 1)	General
Frequency response (IHF '78)	Power consumption
TUNER/AUX/TAPE1, 2/CD	AC outlet
5 Hz ~ 100 kHz, +0 dB, -3 dB	For Australia
PHONO 'RIAA' response20 Hz ~ 20 kHz,	SWITCHED
+0.3 dB, -0.3 dB	For other countries
Maximum input level	SWITCHED
PHONO (MM)120 mV, 0.05% T.H.D. at 1 kHz	Dimensions
PHONO (MC)10 mV, 0.05% T.H.D. at 1 kHz	
Signal to noise ratio	
PHONO (MM)87 dB (IHF '66)	Weight (net)
79 dB (IHF '78)	
PHONO (MC)	
74 dB (IHF '78)	
TUNER/AUX/TAPE1, 2/CD104 dB (IHF '66)	
80 dB (IHF '78)	

mput sensitivity/mpedance	
PHONO (MM)	2.5 mV/47 kΩ
PHONO (MC)	0.2 mV/100 Ω
TUNER/AUX/TAPE1, 2/CD	
Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	
Loudness control	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(VOLUME at -30 dB level)	+6 dB (100 Hz)
(**===:::===::==:::::::::::::::::::::::	+3 dB (10 kHz)
Output level/impedance	10 db (10 kHz)
TAPE REC	200 mV/1 kO
General	
Power consumption	220 W
AC outlet	
For Australia	
SWITCHED	1; (200 W max.)
For other countries	
SWITCHED	3; (Total 200 W max.)
Dimensions	
	H: 137 mm
	D: 345 mm
Weight (net)	8.5 ka
<u> </u>	

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be change without notice.

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Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an.

Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.